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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/663,671

09/17/2003

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7590

03/08/2006

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EXAMINER

HITESHEW, FELISA CARLA

ART UNIT

PAPER NUMBER

1722

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/663,671

**Applicant(s)**

MIYAIRI ET AL.

**Examiner**

Felisa C. Hiteshew

**Art Unit**

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 1-3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>see attached paper</u> . | 6) <input type="checkbox"/> Other: ____.  |

***Information Disclosure Statement***

The Information Disclosure Statement under 37 C.F.R. 1.97 has been received and reviewed. However, the information disclosure is not deemed to be pertinent over the prior art of record.

1. Claims 1-3 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on January 11, 2006.

***Claim Rejections - 35 USC § 112***

2. Claim 4 recites the limitation "...signal processing ..." in line 8. There is insufficient antecedent basis for this limitation in the claim. Please correct.
3. Claim 7 recites the limitation "...crystallinity of the semiconductor film..." in line 14. There is insufficient antecedent basis for this limitation in the claim. Please correct.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi, et al.

Yamaguchi, et al teaches a laser light is irradiated to a semiconductor thin film after the laser light irradiation is measured and conditions for the next laser light irradiation are adjusted based on the measured refractive index value. The laser light irradiation is controlled done by controlling illumination energy of the laser light or the high-intensity light based on the measured refractive index. A laser beam may have any shape suitable for each use, such as, a rectangular shape, a linear shape, a point-like shape, or a planar shape. The discharge out is utilized to control the energy of laser light with an excimer laser.

The difference being that Yamaguchi, et al does not exactly teach sampling a part of a laser beam emitted from an oscillator. However, in the absence of unobvious

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results, it would have been obvious to one of ordinary skill in the art to optimize and modify the process limitation parameters in order to ensure proper orientation. The motivation being that the optimal conditions for performing the method of laser irradiation can be carefully controlled to improve the characteristics of the semiconductor thin film produced.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill might reasonably infer from the teachings. In re Opprect 12 USPQ 2d 1235, 1236 (CAFC 1989); In re Bode 193 USPQ 12; In re Lamberti 192 USPQ 278; In re Bozek 163 USPQ 545, 549 (CCPA 1969); In re Van Mater 144 USPQ 421; In re Jacoby 135 USPQ 317; In re LeGrice 133 USPQ 365; In re Preda 159 USPQ 342 (CCPA 1968).

Expected beneficial results are evidence of obviousness, just as unexpected beneficial results are evidence of unobviousness. In re Novak 16 USPQ 2d 2041 (Fed. Cir., BPAI 1989); In re Hoffman 194 USPQ 126 (CCPA 1977); In re Skoll 187 USPQ 481 (CCPA 1975); In re Skoner 186 USPQ 80 (CCPA 1975); In re Garshon 152 USPQ 602 (CCPA 1967).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felisa Hiteshew whose telephone number is (571) 272-1463. The examiner can normally be reached on Mondays through Thursday from 5:30 AM to 3:00 PM, off first Friday and 5:30 AM. –2 PM on second Friday.

If attempts to reach the examiner by telephone are unsuccessful, the

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examiner's supervisor, Duane Smith, can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-1463.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system. see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866- 217-9197 (toll-free).

  
FELISA HITESHEW  
PRIMARY EXAMINER  
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